CERTIFICATE OF SERVICE

I hereby certify that on this 1st day of February, 2002, I caused true and correct copies of the forgoing Reply Comments of AT&T Corp. to be served on all parties by mailing, postage prepaid to their addresses listed on the attached service list.

Dated: February 1, 2002
Washington, D.C.

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Attachment 1

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

I/M/O THE INVESTIGATION REGARDING LOCAL EXCHANGE COMPETITION FOR TELECOMMUNICATIONS SERVICES	DOCKET NO. TX95120631
I/M/O THE ARBITRATION BETWEEN AT&T COMMUNICATIONS OF NEW JERSEY, INC. AND BELL ATLANTIC-NEW JERSEY, INC.	DOCKET NO. TO96070519
I/M/O THE PETITION OF MCI TELE-COMMUNICATIONS CORPORATION FOR EMERGENCY DECLARATORY RULING ENFORCEMENT OF INTERCONNECTION AGREEMENT WITH BELL ATLANTIC-NEW JERSEY, INC. AND ENFORCEMENT OF ORDER APPROVING INTERCONNECTION AGREEMENT	DOCKET NO. TO98010035
IN THE MATTER OF THE PETITION OF CABLEVISION LIGHTPATH-NJ, INC. FOR ARBITRATION PURSUANT TO SECTION 252(b) OF THE TELECOMMUNI-CATIONS ACT OF 1996 TO ESTABLISH AN INTERCONNECTION AGREEMENT WITH BELL ATLANTIC-NEW JERSEY, INC.	DOCKET NO. TO98060343

COMMENTS OF AT&T COMMUNICATIONS OF NEW JERSEY, INC. REGARDING THE STAFF'S MAY 13, 1999 REPORT AND PROPOSAL

AT&T Communications of New Jersey, Inc. ("AT&T") submits these comments in response to the notice issue by the Secretary of the Board of Public Utilities ("Board") dated May 13, 1999, and the Staff Report and Proposal regarding the testing of Bell Atlantic-New Jersey, Inc.'s ("BA-NJ") operations support systems ("OSS") ("Staff Report").

Introduction

This Staff Report is limited to the critical issue of removing an existing barrier to local competition, the failure of BA-NJ to provide nondiscriminatory access to its OSS. The commitment in the Staff Report to conduct a comprehensive and rigorous third-party test of CLEC access to BA-NJ's OSS, open to all parties, and to "get it right" is welcome and should be adopted by the Board. As detailed below, adoption of the Staff Report by the Board will be the second of three critical steps toward achieving the goal of CLECs obtaining nondiscriminatory access to the OSS that is essential to the opening of the local exchange market to competition.

The first step was initiating the TSFT collaborative for the establishment of appropriate electronic interfaces. While this step is not yet completed, it must be allowed to continue as it is generally expected that the collaborative is likely to lead to the development of the necessary electronic interfaces. The second step will be conducting an independent third-party test as recommended by the Staff. Details regarding the scope of this test are set forth below and in Exhibit 1 to these comments. The third step will be an actual commercial test of the interface and access to BA-NJ's OSS. Commercial testing is necessary

because it is impossible for a testing environment to fully replicate actual conditions.

It is imperative that all three steps be completed fully to attain the Board's goal of removing this barrier to competition.

DISCUSSION

I. THE TSFT OSS COLLABORATIVE

As set forth in previous comments of AT&T, the TSFT OSS collaborative has worked well and should be allowed to continue as recommended by the Staff report.[1] The TSFT OSS generally has operated well and its continuation will permit the TSFT OSS working group the opportunity to fully discuss the number of critical issues that are open (in contrast to the Staff's terminology it is more appropriate that any issue should be categorized as "open" rather than "closed pending" until it is fully and completely resolved) with the hope that the parties can resolve them. It should be noted that the Staff's Report neglects to identify the approximately 90 issues that

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[1] While AT&T agrees with this recommendation, it would be remiss to fully ignore inaccuracies in the chronology set forth in the report. AT&T refers the Board to its April 5, 1999 filing which outlined the actual number of open issues and that a number of those issues remained open as of that date. A significant number of issues remain open as of the date of these comments. AT&T reserves the right to supplement its comments regarding the Staff's statement of facts.

were referred, by mutual consent, to the Pennsylvania OSS process but that do impact the New Jersey OSS development and testing process. These 90 issues must be revisited by the TSFT to insure that they have been satisfactorily resolved.

In general, it is agreed that the Staff is correct in finding that the technicians should be left to resolve the technical problems with Staff oversight and free from any pressure to conclude before the last problem is fixed. This process is the right one. The outstanding issues, consisting of the 57 in New Jersey and up to 90 Pennsylvania/New Jersey issues, may require substantial work to resolve and then verify that the work completed was, in fact, what was agreed to by the parties. Only when it is clear that the parties will not reach agreement on a particular issue is it necessary for the Board to intervene and develop a record on which to base its resolution of the dispute.

AT&T also agrees that this working group should produce a product, i.e. baseline documentation for the electronic interfaces to the BA-NJ OSS, that satisfies the Board's goal of reaching "a level of OSS functionality so

that mass market switching of local telephone customers is possible." Staff Report at 4. Staff also is correct that the baseline documentation cannot be completed until the CLEC and ILEC designers "know specifically what the systems are to support." Id. Thus, any testing of the access to BA-NJ's OSS can occur only after a final decision on all issues relating to the manner in which CLECs receive access to UNEs and what products and services will be offered.

And, as noted in AT&T's comments of May 10, 1999, the Staff's recommendation with respect to UNE-P and extended loops will add unreasonable and unlawful complexity to the system design work. A Board order that provides anything less than the unrestricted UNE platform will increase such complexity because the TSFT OSS working group has operated and developed documentation only for an unrestricted platform and corresponding products and services. The working group did not discuss, much less resolve, how a restricted UNE platform would impact the system design, how it would be accomplished and when it could be completed. For instance, at minimum, baseline documentation would need to be developed that would add new data fields and/or business rules that would identify those central offices where the platform is available and those where it was not. This type of work would not be suitable for the change

management process. All technical experts agreed that the change management process is structured to operate after baseline documentation is developed.

In short, by reaching a pro-competition decision with respect to the UNE platform and extended loops, the Board will also expedite the TSFT OSS process.

II. THE THIRD-PARTY TESTING PROCESS

In its Report, the Staff makes the following recommendations:

- A rigorous third-party test of the access provided to BA-NJ's OSS;
- A review by the third-party tester to identify differences between BA-NJ's OSS and BA-PA's OSS; and
- A determination by the third-party tester as to whether any testing performed in Pennsylvania would be applicable or relevant in New Jersey.

AT&T fully agrees that a rigorously-formatted test which simulates the commercial demands of a truly competitive marketplace, designed and conducted by a neutral third-party, will provide the Board, CLECs and BA-NJ with unbiased and meaningful information about whether the OSS resolutions reached as a result of the collaborative process have been effectively implemented. Staff's insistence on a rigorous test is consistent with the FCC's Section 271 decisions where it emphasized that "third-party reviews should encompass the entire obligation

of the incumbent LEC to provide nondiscriminatory access, and, where applicable, ***should consider the ability of actual competing carriers in the market to conduct business utilizing the incumbent's OSS access.***"[2] (emphasis added)

In light of Bell Atlantic's agreement with the adoption of third-party tests in New York and Pennsylvania, it is not anticipated that BA-NJ will oppose a third-party test. If it does, however, the Board should reject any suggestion that a third-party test is unnecessary. The New York testing experience has demonstrated the substantial value gained from a third-party test. Other state commissions, such as Pennsylvania, Texas and Georgia, also recognized that value and have endorsed and implemented a third-party testing process. Indeed, given the overwhelming evidence showing the benefits of an independent test, the Board would be remiss if it did not support a robust third-party test.

In New York, an independent testing firm (KPMG Peat Marwick) was selected to develop and conduct a rigorous test of Bell Atlantic's OSS and a second company (Hewlett Packard) was hired to act as a "pseudo-CLEC" and construct

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[2] *Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as Amended, to provide In-region Telecommunications Services in Michigan,* CC Docket 97-137, Memorandum Opinion & Order (*"Ameritech Michigan Order"*), at ¶ 216.

working systems to interface with Bell Atlantic during the test. Thus, the testing companies acted as a CLEC and were to process sufficient volumes of transactions to explore the full range of the functionality of the OSS programs of that ILEC for each mode of market entry. At this time, AT&T supports the retention of both companies in New Jersey.

It is recommended that the arrangement between the third-party tester and the "pseudo-CLEC" be one of contractor and sub-contractor. This provides a reasonable and clear definition of each company's role. Further, the Board would be the client of the third-party tester even though all audit costs would be recovered from BA-NJ. This arrangement is consistent with what has been done in New York and Pennsylvania. The final key piece of this relationship is that the contract should not be for a fixed fee. The New York testing experience proved that a number of problems can arise, the extent and scope of which cannot be predicted in advance. In such an environment, a fixed fee contract could negatively impact the third-party tester's economic incentive to conduct a thorough and complete test.

An essential part of the third-party process is that it be fully open. The Staff and the CLECs should be able

to completely participate and monitor the process. All information provided by BA-NJ to the third-party tester should be available to CLECs at the same time. CLECs should be able to participate in all conference calls and meetings between BA-NJ and the third-party tester. Any other contacts or exchange of information between the third-party tester and BA-NJ should be recorded and promptly distributed to the CLECs.

The test must evaluate processes, systems, operations and personnel from "end to end" in order to allow CLECs the opportunity to provide New Jersey customers local service on parity with Bell Atlantic. For example, it is not sufficient to test only whether the electrons associated with a pre-order query can pass through the interface between the CLEC and BA-NJ systems. The test must track the pre-order query from the time it is generated by the CLEC representative until the time a response is received by that representative from BA-NJ. Not only the timeliness of the response but also the accuracy of the response must be measured. Besides the interface itself being subject to rigorous testing, the test must also evaluate the different processes used by the various BA-NJ employee work groups involved, the conformity of the processes to the documentation, and how the various "back

office" systems work in conjunction with the OSS interfaces. Of course, the test must evaluate all OSS functions: pre-ordering, ordering, provisioning, maintenance and billing. Since the New Jersey test will also have the benefit of previous third-party testing experiences, it should strive to include known areas of difficulty, i.e. "Exceptions," revealed in those tests to insure that the appropriate corrective action was taken in New Jersey. Finally, it is essential that the third-party test evaluate a variety of scenarios that will reflect as closely as possible actual commercial operation. A detailed outline of the appropriate methodology and scope of the third-party test is set forth in Exhibit 1 to these comments.

As set forth in Exhibit 1, one of the first steps for the third-party test, after selection of the third-party tester, is the development of a comprehensive test plan. A test plan describes, in detail, the nature of the test from technical, managerial and analytical perspectives. The technical plan identifies the systems to be used, the computing environment that hosts the testing process, the connectivity of electronic systems, test transaction volumes and threshold conditions that comprise the test. The managerial perspectives provide the testing transaction

scenarios, the structure of the test and its sections or major milestones, roles and responsibilities of the parties that are involved in the test and a schedule of events that are to be marked for measuring progress. The analytical perspective addresses the expectations and results concerns -- the entrance/exit or pass/fail criteria. The pass/fail criteria should be defined prior to beginning the testing and should reflect an environment that provides nondiscriminatory access and removes OSS as a barrier to competition. Further, the analytical side describes the performance standards for conducting tests and formulation of the records that show the results achieved.

In its Report, Staff also sought comment on the appropriate forum for the testing of BA-NJ's OSS and the issue of participating in the Pennsylvania OSS test. Because a third-party test must test all components of the OSS from end to end, it is critical that state-specific testing be conducted. Any unreasonable limitations on the scope of the test due to the existence of earlier third-party tests would be ill-advised as it incorrectly assumes that these first tests "got everything right". Due to the limited industry experience with third-party testing (Pennsylvania likely will be only the third state to initiate testing), we would expect that New Jersey should

be able to improve on those models and correct past oversights or errors. Depending on the current state of affairs in the Pennsylvania test, it may make sense for the collaborative teams in New Jersey and Pennsylvania to work together on general test design and scope issues, the specific test design and test for each state must reflect the unique systems, personnel and processes found in each state.

Notwithstanding this interaction, the appropriate forum remains within the TSFT process, including all discussions regarding any issues relating to New Jersey testing done in conjunction with Pennsylvania. The first step in determining whether there can be any meaningful collaboration regarding the testing processes for BA-NJ and BA-PA would be an analysis of the level of commonality between each operating company's legacy systems, service centers and work processes. AT&T agrees that the independent third-party tester would be the appropriate party to conduct this analysis, subject to the same full and open process required for the testing.

The Board should certainly take advantage of the learnings from Pennsylvania, especially any resolutions of issues that are also present in New Jersey, in conducting the New Jersey collaborative and third-party test.

However, as the Board's TSFT is well aware, there are indisputable differences between the operation of the OSS in New Jersey and Pennsylvania, including multiple differences in the "back office" legacy systems (Service Order Processor, CRIS billing systems and provisioning centers). A single test covering both states will not adequately evaluate the operation of the OSS in each state. For example, the "back office" systems used in Pennsylvania were developed by the former Bell of Pennsylvania and are materially different from those used in New Jersey that were created by the former New Jersey Bell. Even where back office systems share the same name, e.g. CRIS billing systems, there are substantial differences between the New Jersey CRIS system and the Pennsylvania CRIS system.[3] Due to these differences there must be end-to-end testing of the systems. Also, different documentation exists for the different systems in these two states. In addition, different groups of employees perform order provisioning and coordination, "hot cut" and other critical processes in the two states, and it is insufficient to evaluate one state's employees for purposes of determining performance in the other state. To take a simple example, hot cuts in

[3] This is not surprising since one company may modify or update a system to meet its business needs, while the other company may

New Jersey central offices will be performed by Bell Atlantic-New Jersey personnel, not Pennsylvania employees.

Attached as Exhibit 2 to these comments is a summary of the differences in legacy systems between New Jersey and Pennsylvania as understood from the TSFT process. There seems to be no dispute that when different legacy systems are involved with the "common" interface, each legacy system must be tested independently. Lastly, in order to avoid any due process concerns, it is necessary that a procedure be put in place so that parties to the local competition proceeding receive notice and an opportunity to participate in any Pennsylvania proceedings and/or testing that concerns New Jersey issues. Any testing process that excludes the participation of New Jersey CLECs violates due process and raises questions as to the reliability of the process.

III. COMMERCIAL TESTING IS NECESSARY

Passage of the third-party test by BA-NJ does not insure that CLECs will have nondiscriminatory access to OSS as they seek to enter the local market and serve real customers. A test environment, by its very nature, cannot exactly mirror actual commercial experience and usage. The FCC has stated that the most probative evidence of

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have made different changes to meet its different business

operational readiness is actual commercial usage. "Carrier-to-carrier testing, independent third-party testing and internal testing also can provide valuable evidence pertaining to operational readiness, but are less reliable indicators of actual performance than commercial usage."[4]

It is critical that testing occurs in both a quality assurance ("QA") environment and a production environment. AT&T's own experience with Bell Atlantic has shown that there can be significant differences between the QA environment and the production environment involving actual orders. In one case, the same software updates were not made in both environments. This resulted in failures in the production environment that were not captured in the QA environment.

More recent evidence comes from the experience in New York with loop hot cuts. Although BA-NY maintains that it has passed the third-party test, it cannot satisfactorily provision actual loop hot cuts. In a recent week, 14 of 37 hot cut orders (38%) resulted in hot cut loops that did not work as initially provisioned by Bell Atlantic-New York due to BA-NY's acknowledged provisioning errors. Customers

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objectives.

[4] *Ameritech Michigan Order at ¶138.*

experienced interruptions of telephone service as a result of these provisioning errors ranging from 2 hours to 7 days.

Evidence that a test does not exactly mirror commercial usage even comes from BA-NJ's past claims that its electronic interfaces had passed a Coopers & Lybrand test. According to BA-NJ, that test demonstrated that its interfaces were working.[5] The TSFT process has revealed that those interfaces did not work when used for actual customers. For instance, numerous billing errors occurred that still have not been corrected.

It should be expected that BA-NJ would devote whatever resources are necessary to pass the third-party test in order to further its hopes of satisfying this item of the Section 271 checklist. However, during the third-party test BA-NJ is not losing customers to competitors and has the Section 271 "carrot" to devote the necessary resources. It is, therefore, reasonable and in the public interest for the Board to establish a three-month period of commercial testing and the presentation of performance results according to agreed-upon standards and metrics before consideration of a Section 271 application. The

[5] As the Board is aware, AT&T and others strongly dispute that the Coopers & Lybrand test was a valid test that produced valid results.

Pennsylvania commission also recognized these concerns and will include such a testing period in its OSS process.

Presumably, the last thing that the Board would like to see occur is a situation where numerous customers suffer loss of phone service because of provisioning errors similar to those experienced currently in New York. Loss of phone service prevents people from reaching emergency services and from receiving or sending critical information. Acting in the public interest virtually requires the Board, as well as the parties, to undertake commercial testing. Only such testing will insure that the OSS process works so that when a hospital, a doctor's office or any other customer switches from BA-NJ to a CLEC they do not lose phone service and place people in life-threatening situations.

Following the conclusion of the commercial testing, the Board can make an informed assessment and decision of the extent to which BA-NJ has removed access to its OSS as a barrier to competition.

Conclusion

The adoption of the Staff recommendation to continue the TSFT OSS process and to initiate a rigorous third-party test should be adopted. The third-party test must be consistent with sound testing principles in order to

achieve the Board's goals and the Act's requirements that BA-NJ provide nondiscriminatory access to its OSS. These testing principles include the following:

- A comprehensive test plan;
- Specific entrance/exit or pass/fail criteria established before testing begins;
- A fully open process;
- Rigorous third-party test; and
- End-to-end testing of the gateway interfaces and legacy systems in a production or commercial usage environment.

By not deviating from a rigorous third-party and commercial testing process, it is hoped that the Board's actions will lead BA-NJ to provide nondiscriminatory access to its OSS as required by the Telecommunications Act of 1996 and the Board.

Dated: May 27, 1999

Respectfully submitted,

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EXHIBIT 1

PLAN FOR IMPLEMENTING THIRD PARTY TESTING

TABLE OF CONTENTS

Executive Summary

In order to test the capabilities of BA-NJ systems necessary for CLEC use in entry into the local market, the Board should select an independent, technically-competent third party tester or testers (TPT) and mandate that the TPT design and conduct a thorough and independent test of BA-NJ's Operational Support Systems (OSS). A process for selecting the TPT is recommended. The TPT should develop a detailed and specific test plan that will enable the TPT to test all BA-NJ procedures, processes and systems made available by BA-NJ for use by a CLEC entering the local market and maintaining their customer base once they've established their local business. The plan should include an Exception Process to be invoked by the TPT when the test identifies a critical flaw in the system or process under review, and must require repeated regression and transaction testing until the critical flaw is resolved.

The TPT should test BA-NJ processes (a relationship and operational analysis) as well as systems (a transaction-driven system analysis) that provide necessary support to CLECs in New Jersey. Each of the entry options that may be used by a CLEC are to be tested, including but not limited to resold services, unbundled network elements (UNEs), the UNE platform, UNE combinations other than the platform, extended loops, interim and permanent number portability, and operator, and directory listings and directory assistance services. The test plan should cover the full range of possible order types through the entire sequence of functionalities available to CLECs, and should evaluate all modes of market entry to ensure that OSS for all modes of entry contemplated by the Telecommunications Act is available to CLECs. Pre-ordering, ordering, provisioning, maintenance and repair and billing systems should be tested. Test orders should be designed to test BA-NJ's ability to process commercial volumes, including spikes as well as sustained volume. Additionally, the TPT should establish a basis for comparing BA-NJ's internal performance with the performance it provides to CLECs, and should collect data and records as necessary to evaluate such performance over a period of time to sufficiently assess the stability of the systems and processes performance levels.

The final test report should be designed to assist in determining whether BA-NJ is providing nondiscriminatory access to its OSS, information in data bases that support the OSS functions and, through its OSS, to BA-NJ's underlying network.

STEP ONE: CHOOSING THE THIRD PARTIES

GOAL: Selection of completely independent, technically-competent third party testers under mandate to design and conduct a thorough and independent test representing the needs of the CLEC industry endeavoring to do business in New Jersey.

Process Overview:

1. After receiving appropriate input from parties, the Board establishes guidelines/principles for test process, including the scope of the test, which will establish a framework for the test plan that will be developed by the Third Party Testers (TPTs). Opportunities for input by parties may include written comments, workshops or hearings.
2. The Board then selects TPTs as described below.
   - A. Sole Source Procurement:
     State procurement law may be applicable, although the Board would not be paying the TPT. If possible under state procurement law, a knowledgeable and experienced vendor should be selected to develop and conduct the evaluation (the "Test Manager") and an experienced and technically skilled vendor should be selected to build the OSS interface and execute test transactions through that interface (the "Test Transaction Generator"). Both the Test Manager and the Test Transaction Generator will be referred to as "the TPT". Sole source procurement may be justified based on the prior experience of these parties and the highly technical and specialized nature of the test.
   - B. Request for Proposal (RFP) Process:
     If sole source procurement is not possible, the Board would issue one or more Requests for Proposals (RFPs) for the Test Manager and the Test Transaction Generator as follows:
     - (1) The Test Manager should be selected first or both may be selected together.
       - (a) The state Board could use the NY RFP as a template.
       - (b) Parties submit comments regarding suggested modifications to template. If the Board elects not to use NY RFP as template, parties would submit draft RFP for review.
       - (c) Board reviews comments and issues RFP.
       - (d) Applicants' responses to RFP will be provided to staff and parties, all of whom rank selections (process similar to selecting arbitrator) and submit ranking to Board, along with comments.
       - (e) Board reviews comments, eliminates from consideration those who do not meet selection criteria, and selects applicant most highly ranked by the parties that meets all criteria.
     - (2) If two sequential RFPs are desired, the Test Manager will assist the Board in preparation of an RFP for selection of the Test

Transaction Generator, following the same template/comment/review procedure noted above.

Discussion:

1. TPT must be demonstrably neutral and independent.
2. The Board, rather than BA-NJ or CLECs, will be the TPT's client.
3. Sole source procurement would be faster and more cost-effective than the RFP process. If sole source procurement is not available, use of the NY RFP would offer a proven baseline and expedite the process.

STEP TWO: DEVELOPING THE TEST PLAN

Goal: To develop a detailed and specific test plan that will enable the TPT to test all BA-NJ procedures, processes and systems offered by BA-NJ for use by a CLEC entering the local market. The test plan must be consistent with the Board's view of the scope appropriate for the test and the Board's determination of the scope of the test should pay consideration to the eventual consultative role it will play at the FCC regarding BA-NJ's Section 271 application.

Process overview:

1. TPT gathers information and prepares test plan.
   - A. TPT gathers information from BA-NJ tariffs and other obligations regarding BA-NJ products and services that CLECs may purchase from BA-NJ.
   - B. TPT gathers information from BA-NJ regarding procedures, processes and systems available to CLECs.
   - C. TPT gathers information from CLECs regarding transaction volumes that should be tested over at least three periods that reflect CLEC judgments on the levels of competitive activity in New Jersey. The periods are (a) at the projected start date for the test, (b) a point six to nine months from the start date for the test and (c) a point twelve to eighteen months from the start of the test. The volume estimates should also be obtained from BA-NJ according to its view of competition that involves OSS transactions. The CLEC volumes must be consolidated and compared to the BA volume forecasts and form the basis for determination of the volumes that will represent the floor volumes for test planning.
   - D. The TPT must also provide a set of adjustment parameters that surround the transaction volumes that represent system stress levels on the OSS for upper and lower limits reflecting the variable affects of competition on the OSS.
   - E. TPT uses this information to develop plan that will include two types of evaluations: (1) Relationship and operational analysis and (2) Transaction-driven system analysis
   - F. TPT publishes draft plan for comment by parties, including Board staff.
   - G. TPT revises test plan if necessary.
   - H. TPT issues final test plan including an estimated timeline.
2. To ensure integrity, the entire testing process should be open:
   - A. All information provided by BA-NJ to the TPT must be available to CLECs and distributed at the same time.
   - B. All written communications between BA-NJ and the TPT should be provided to the CLECs.
   - C. All meetings held between BA-NJ and TPT must be open and conducted with CLEC and Board staff participation. Meeting minutes must be distributed to the interested parties.
   - D. The CLECs should have all information necessary to allow them to verify, through subsequent testing or commercial operations, the processes under

investigation by the TPT to ensure that real-world experience bears out the tester's experience.

E. All commitments given must be tracked and resolutions documented and made available to all CLEC's.

3. Test plan must include an Exception Process to be invoked by TPT when the test identifies a barrier to progress according to the plan schedule, a critical flaw in system or process under review, and must require repeated regression and/or transaction re-testing until the critical flaw is resolved.
   A. TPT would issue a notice of exception, documenting the flaw.
   B. BA-NJ would be given an opportunity to respond to the exception, with response provided to CLECs.
   C. Thereafter, CLECs and staff would have the opportunity to submit comments.
   D. If BA-NJ elects to clear the exception, it shall use the existing Change Control Process or Account Management Process to do so, and the TPT shall document and evaluate BA-NJ's efforts to clear the exception.
   E. Once BA-NJ determines that the flaw has been remedied, the TPT shall re-test the system or process, and shall repeat this process as necessary until the critical flaw is resolved or BA-NJ elects not to clear the exception.
   F. The Exception Process documentation should be available in a timely and complete manner on a public Website accessible by all interested parties.
4. The TPT Plan must include a process with the CLECs to communicate status of the testing as well as provide the CLECs a forum for input related to experiences in market warranting modifications to the test plan.

Discussion:

The Test plan must be developed by TPT, based upon information gathered independently by TPT, and with opportunity for comment by parties and staff. The Plan should include protocols to test processes (relationship and operational analysis) as well as systems (transaction-driven system analysis). Each test must have clearly defined entrance and exit criteria as well as specific evaluation metrics defined.

1. Relationship and Operational Analysis:
   A. The Test plan should allow the TPT to evaluate the entire market entry process, using all modes of entry contemplated by the Telecommunications Act, regardless of whether any single CLEC currently is using such entry strategy in BA-NJ's territory, and regardless of pending legal challenges to issues related to provision of UNEs or UNE combinations.
   B. TPT should incorporate test protocols to evaluate day-to-day operations and operational management practices, including policy development, development of procedures and procedural change management , as well as performance management processes.. The TPT should validate and verify processes to determine that they function correctly and according to documentation and expectations. The TPT must also provide sufficient

information to enable the Board to find whether BA-NJ's performance provides parity service to the CLECs.

C. The Test Plan must identify the OSS Baseline documentation, including document titles, versions, publication dates, that the TPT and the TTG will use it the context of the test. These documents may change during the course of the test and the Baseline records must identify the point where changes are made to incorporate new versions of baseline documents.

D. The Test plan should allow the TPT to 'stand in the shoes' of a CLEC entering BA-NJ's market, so it will be able to fairly evaluate BA-NJ's performance with regard to all tasks normally performed in conjunction with a CLEC's market entry, including but not limited to:

(1) Account establishment and management
(2) Interface development
(3) Interconnection planning
(4) Network design
(5) Collocation planning, ordering and management
(6) System administration help
(7) CLEC training
(8) Forecasting
(9) Interconnection agreement or adoption of SGAT
(10) Contracts for Usage Records
(11) Contracts for access to databases
(12) Contracts for UNE combinations
(13) Contracts for LNP
(14) Problem resolution
(14) Connectivity Testing
(15) System Certification/ QA Testing
(16) Change Management

E. TPT must rely upon as well as evaluate BA-NJ's established methods and procedures, including its Change Control Process and Account Management Process.

(1) All changes to systems, processes and documentation during the test must be made through established Change Control or Account Management Process, whether initiated by BA-NJ or requested by the TPT or a CLEC.

(2) Test plan must include an evaluation of BA-NJ's compliance with its established procedures.

2. Transaction-driven system analysis:

TPT should develop test protocols to initiate transactions, track transaction progress, and analyze transaction completion results to evaluate all systems being tested. In order to do so, the TPT must (a) define service order types to be processed, using BA-NJ's pre-ordering, ordering and provisioning systems; (b)

define maintenance, repair and emergency restoration scenarios; and (c) define CLEC billing requirements. To the extent that the test progresses over a timeframe during which new releases of systems, documentation or specifications are produced by BA-NJ – the test plan must provide for evaluation of the new release process followed by BA-NJ.

A. Defining service order types to be processed:

(1) Each of the entry options that may be used by a CLEC should be tested, including but not limited to resold services, UNEs, UNE-P, UNE combinations other than the platform, extended loops, INP, LNP, and operator and directory assistance services.

(2) The test plan should identify the full range of possible order types through the entire sequence of functionalities and over all system interfaces available to CLECs, regardless of whether any single CLEC is using all interfaces, including manual interfaces. Tests should evaluate all modes of market entry including, but not limited to, resale, UNEs, UNE combinations and interconnection. This is needed to ensure that OSS for all modes of entry contemplated by the Telecommunications Act are available to CLECs regardless of whether other barriers currently prevent CLECs from entering the local market.

(3) Order types would be used to generate detailed, real-world scenarios, including specific order and customer information, which will form the basis for specific test orders. Order types should not be limited to those currently in use.

(4) The plan should provide for test orders to be initiated and followed through the entire sequence of functions, including preordering, ordering, provisioning, maintenance and repair, and billing. More detailed requirements for testing each function are listed below. Input must be gathered from CLECs regarding suggested scenarios for testing as well as volume forecasts to establish appropriate transaction mixes. To the extent that restrictions exist from any products/services offered by BA-NJ, the test plan must specifications, test the application of those restrictions.

(5) Test orders should be placed using the process described in BA-NJ's documentation, and should allow for a thorough assessment of BA-NJ's systems in expected real-world operation. Orders should be designed to test:

(a) Electronic flow-through
(b) Manual procedures
(c) Timeliness
(d) System fault tolerance
(e) Restoration and backup procedures
(f) BA-NJ's ability to identify and respond appropriately to foreseeable transaction errors (invalid USOC, incorrectly populated field) and change orders

(g) Ability to process commercial volumes, including spikes as well as sustained volume

(6) The mix of orders should be realistic, involving the types of orders that are likely in a competitive environment. CLECs should be able to provide input to the TPT. Relationships (ratios) between transaction types should also be realistic, for example the ratio of pre-order transactions to order transactions and invalid orders to valid orders.

(7) The TPT should develop, submit, and track all transactions to/from BA-NJ including but not limited to the Local Service Requests (LSRs) and Access Service Requests (ASRs) when used to order local services and products based on BA-NJ and CLEC provided documentation. The transaction details must be available for the CLECs to review and evaluated.

(8) The process for ordering and obtaining CLEC collocation within BA-NJ end offices must be tested.

(9) See Appendix 1 for specific requirements for testing pre-ordering, ordering and provisioning.

(10) Test orders should evaluate the integratability of the systems specifically the pre-order and order functions

B. Define maintenance, repair and emergency restoration scenarios:

(1) Test orders should allow for evaluation of the electronic bonding interfaces and non-bonded interfaces, and should test functionalities including OSS interface availability, average OSS response interval, average answer time-repair, missed repair appointments, customer trouble report rate, maintenance average duration, percent repeat troubles (within 30 days) and out of service greater than 24 hours.

(2) Maintenance and repair functionalities for each possible market entry option should be tested, including resale, interconnection and UNEs, individually and in combinations, including the UNE platform. Again, the test plan should specify that pending legal challenges to the issue of whether, to what extent and at what price BA-NJ may or may not be required to offer any particular UNE or combination of UNEs may not be considered in developing and processing test orders.

(3) Order types must be sufficiently defined to allow testing and evaluation of all maintenance and repair functions, on a network as well as customer-specific basis, and on an emergency as well as routine basis, including:

(a) OSS and work processes such as

(i) Manual

(ii) RETAS

(iii) Electronic Bonding Interface (EBI)

(iv) T1/M1

(v)

(vi) MLT
(vii) Legacy systems
(viii) Central office and field forces
(ix) Recent cut-over/repair requests (less than 24 hours)

(b) Performance measurements such as
(i) Interface availability
(ii) Response interval
(iii) Answer time
(iv) Missed repair appointments
(v) Trouble rate and average duration
(vi) Repeats
(vii) Out of service greater than 24 hours
(viii) OS/DA answer speed
(ix) OS/DA percent answered within X seconds
(x) Trunk group service summary and detail
(xi) Accuracy of support/help desks
(xii) # (%) of troubles within 24 hours of cuts
(xiii) Intervals to resolve

(4) In addition to documenting maintenance and repair in connection with test orders, the test should include trouble created and reported by the tester, including:
(a) Open and short on the main distribution frame
(b) Open and short on CLEC's collocated frame or at POT frame
(c) Noise/echo on the line

C. Define CLEC Billing Requirements:
(1) Test orders should allow for evaluation of invoice accuracy, invoice timeliness, usage data accuracy, and usage data, timeliness, and ability to capture usage data for all calls including local and access.
(2) The test should also include an audit of BA-NJ's end-user billing, wholesale billing, reciprocal compensation billing, and access billing. The test should cover three complete billing cycles.
(3) Billing functionalities for each market entry option should be tested, including resale, interconnection and UNEs, individually and in combinations, including the UNE platform. Again, the test plan should specify that pending legal challenges to the issue of whether, to what extent and at what price BA-NJ may or may not be required to offer any particular combination of UNEs may not be considered in developing and processing test orders. To the extent that restrictions exist for any products, the test plan must specifically test for the appropriate treatment of those restrictions
(4) Usage tests must be completed using the various in/out bound call types.

(5) Repair/Maintenance scenarios should be carried through to billing as appropriate.

5. Order types must be sufficiently defined to allow testing and evaluation of all billing functions, on a wholesale as well as customer-specific basis, including:
    (a) OSS and work processes such as
        (i) Daily Usage Feed
        (ii) Access Daily Usage Feed
        (iii) EMR
        (iv) CRIS
        (v) CABS
        (vi) Legacy systems
    (b) Performance measurements such as
        (i) Invoice accuracy and timeliness
        (ii) Usage accuracy
        (iii) Usage timeliness
    (5) Test protocol should ensure that BA-NJ provides reliable and verifiable billing data that can be used by TPT to render complete and accurate bills for all services, including usage detail to its wholesale and retail "customers".
    (6) Test should continue over the course of at least three complete billing cycles to ensure results are verifiable and reliable.

STEP THREE: PRE-TEST SETUP ACTIVITIES

GOAL: Completion of three pre-test activities in preparation for testing activities: (1) Establish basis for comparison of BA-NJ's internal and external performance, (2) assemble resources necessary to perform test, and (3) attain test plan entrance criteria.

Process Overview:

1. Establish basis for comparison of performance:
   - A. Establish activities and outcomes to be tracked.
     - (1) The starting point should be the measures, standards, and disaggregation levels required by the final Carrier-to-Carrier Guidelines adopted by the Board.
     - (2) The TPT reviews the performance measures currently ordered by Board.
     - (3) Based on these sources and based on other information collected by the TPT during the test development process, the TPT establishes meaningful methods to track and compare BA-NJ's performance in its provision of service to itself and to CLECs during the test process.
   - B. After appropriate tracking and comparison measures including clearly defined data sources have been established, the TPT audits BA-NJ's implementation of such measures to determine completeness, accuracy and reliability of BA-NJ's performance reporting process.
2. Assembling test resources:
   - A. TPT obtains Test Bed of working telephone numbers and associated Customer Service Records.
   - B. TPT obtains test lines from a variety of sources.
   - C. Designed call flows and calling scripts
   - D. Identification of CLEC "customers" that could participate as test accounts
3. Attain test plan entrance criteria:
   - A. Test plan has been completed.
   - B. All required BA-NJ interfaces are operationally ready.
   - C. The Test Transaction Generator Vendor must be operationally ready.
   - D. BA-NJ Performance Measurements are proven to be reproducible and accurate as provided by BA-NJ. (i.e., audited)
   - E. CLEC facilities and personnel are available to support the CLEC elements of the Test plan.
   - F. Connectivity has been established
   - G. Application – to- application QA testing has been completed

Discussion:

These are three separate activities that may proceed concurrently.

1. Establishing basis for comparison of performance and evaluating its implementation:
   - A. At a minimum, the following aspects of performance must be audited:

(1) Documentation review: All supporting documentation for the performance measurement definitions, calculations, inclusions, exclusions, disaggregation, and data retention must be identified and explained to the auditor.

(2) Compliance review: All software procedures, including data collection, calculation and retention, must be assessed for conformance to the documented system.

(3) Output validation: System outputs must be assessed to determine whether reports are complete, accurate and timely and whether data transferred to data stores are accurate and up to date.

(4) Comparison validation: Comparative procedures must be assessed to assure that BA-NJ uses the methodology designated for determining compliance with performance requirements.

B. TPT should collect data and manual records as necessary to evaluate performance, including but not limited to:

(1) Data recorded by TPT, reflecting the TPT's test experience, such as:

(a) Systems records from the electronic interface established with BA-NJ

(b) Data gathered from CLEC systems where those systems are used as the interface vehicle

(c) Manual records kept by the TPT

(2) Data supplied by CLECs, reflecting commercial experience, including manual records.

(3) Data supplied by BA-NJ in compliance with the performance measures established by the TPT.

(4) Manual records kept by test participants.

C. TPT shall analyze the collected data using appropriate statistical techniques to determine whether such performance is provided at parity. The TPT shall issue an Exception in each instance where it determines that performance is not provided at parity.

D. The tracking and comparison methodology established by the TPT must be detailed and disaggregated in order to allow for parties (the Board staff, the TPT, and CLECs) to collect data that can be evaluated on "apples-to-apples" basis.

2. Assembling resources necessary to perform the test:

A. TPT should obtain a Test Bed of working telephone numbers and associated Customer Service Records.

(1) Obtain a sufficient quantity of numbers to use for purposes of testing. The quantity of telephone numbers shall be determined by the TPT and must be sufficient to allow concurrent, rather than sequential processing of test orders so as to expedite the testing process.

(2) Test bed should consist of numbers from a representative cross-section of BA-NJ's switches throughout the state. Actual loops will not be connected; the numbers will be used to test the

provisioning systems in BA-NJ's switch for resold service and the unbundled local switching element.

B. TPT will need to obtain a number of test lines in addition to the Test Bed of telephone numbers to test provisioning, repair, restoration, call performance and billing.

(1) Residence test lines should be provisioned to CLEC and BA-NJ employees as customers in order to allow testing on actual working lines. These lines should be non-critical second lines established for test purposes.

(2) New lines should be provisioned to a location(s) which the TPT may access for verification of ordering, provisioning and repair.

3. Attainment of entrance criteria:

A. Test plan has been completed by the TPT.

B. All pending legal and regulatory proceedings that affect the ability to perform the test must be concluded in a manner that allows testing to proceed.

C. All required BA-NJ interfaces are operationally ready. Electronic interfaces to all OSS access functions must be fully tested and operational.

D. The Test Transaction Generator Vendor must be operationally ready.

E. CLEC facilities and personnel are available to support the CLEC elements of the Test plan. This could include designation of appropriate on-site working space and equipment for the testers, the training or hiring of necessary personnel, and any other appropriate measures in order to facilitate test implementation.

STEP FOUR: PERFORM RELATIONSHIP AND OPERATIONAL ANALYSIS TESTING

GOAL: A thorough analysis of the systems, processes and other operational elements associated with BA-NJ's establishment and maintenance of business relationships with CLECs to evaluate adequacy, completeness and effectiveness.

Process Overview:
Per test plan.

Discussion:

1. The TPT must build interfaces necessary to process CLEC-to-BA-NJ transactions.
   A. In order to determine whether BA-NJ's documentation is sufficient to permit CLECs to develop their OSS, TPT should build all OSS interfaces necessary to enter the market across the range of order types and for each Service Delivery Method.
   B. Interfaces built by the TPT should be sufficient to allow the TPT to simulate, as closely as possible, the experience of a CLEC entering the local market.
   C. Test systems can be built more quickly and cheaply than CLEC systems because they are not integrated into real back-end business operations and need not be as large and robust as actual commercial systems.
2. Activities must be based upon documentation routinely provided to all CLECs, including technical specifications, business rules, CLEC handbooks, and support routinely provided to all CLECs.
3. As part of the process, TPT should test and review all supporting documentation and should determine and report upon:
   A. Ease of understanding and interpretation
   B. Accuracy and reliability
   C. Consistency
   D If problems exist, whether fully documented updates were timely provided to all CLECs
   E. Adequacy of control process for documentation changes
4. Upon completion of interfaces, TPT conducts systems qualification (connectivity and end-to-end testing).
   A. If no documented qualification process is in place, TPT prepares documentation of test process that can be applied in the future.
   B. If qualification process fails, TPT issues Exception and retests in an appropriate manner to ensure that the exception can be adequately closed.
5. TPT must also evaluate the ability of the CLECs to integrate the information and functions provided by BA-NJ's pre-order and ordering systems.
6. During on-going operation of the test, TPT conducts evaluations of the change management and system administration help desks and escalation procedures.
7. The TPT also must evaluate the business-to-business aspects of attempting to enter the local market, including:

A. Account establishment and management
B. Network design, collocation, and interconnection planning
C. CLEC training
D. Forecasting

8. As part of the business-to-business evaluation, TPT should test and review all supporting documentation and should determine and report upon:
   A. Ease of understanding and interpretation
   B. Accuracy and reliability
   C. Consistency
   D. If problems exist, whether fully documented updates were timely provided to all CLECs
   E. Adequacy of control process for documentation changes

STEP FIVE: CONDUCTING THE TRANSACTIONAL TEST

GOAL: Find and fix problems that would inhibit entry into the local market. BA-NJ must clear all identified exceptions and TPT must re-test until completion is verified before it will be considered to have passed the test.

Process Overview:
Per test plan.

Discussion:

1. Transactional testing must be end-to-end, and thoroughly test pre-ordering, ordering, provisioning, maintenance and repair, and billing, including integration of pre-ordering and ordering. Access to all of these functions is imperative for full scale commercial operation by competitors.
2. Test orders should be as "blind" as possible. Additionally, volume and stress testing should be initiated without advance warning to BA-NJ.
3. Test should include "normal" and peak commercial volumes, to be calculated based on information from BA-NJ and the CLECs. Data to be evaluated would include:
   - A. BA-NJ Demand Forecast for 1999 and 2000
   - B. BA-NJ In-Service Actuals and Forecasts
   - C. CLEC Service Forecast Data Compiled by BA-NJ
   - D. Historic CLEC OSS Usage Data
   - E. BA-NJ CLEC Transaction Actuals as of (most recent available)
   - F. Resale Service Activity Reports
   - G. Case Studies of Market Share Changes in related Markets
   - H. CLEC Forecasts provided to TPT
4. "Normal" commercial volume would be that expected in the normal course of business after full competition is in place.
   - A. Peak volumes should be established of at least 150 percent of "normal" commercial volumes.
   - B. A volume stress test should be conducted over multiple days, in the TPT would place a large number of orders per hour over a course of several days in order to determine whether BA-NJ can process such orders and whether performance is provided at parity.
   - C. The test should include meaningful volumes of manual orders.

STEP SIX: FINAL ANALYSIS AND REPORT

GOAL: The final test report should determine whether BA-NJ is providing nondiscriminatory access to its OSS and, through its OSS, to its underlying network. The report should describe the underlying approach of the tests, describe the methodology used in each of the tests, and list the test data and results of each test. The report should provide sufficient detail to allow uninvolved third parties to fully understand how the test results were derived.

Process Overview:

1. The TPT completes qualitative and quantitative analysis and issues a draft report at the contracted interval.
2. Parties, including the Board staff, will have the opportunity to provide comments.
3. TPT publishes final report.

Discussion:

1. Final report should provide results of the test, per the test plan by the TPT.
2. The report should describe any differences between the access to OSS functions BA-NJ provides itself and that which its provides to CLECs. Operational effect of such differences should be analyzed and TPT should make recommendations to rectify such differences.
3. The report must provide an itemization of each Exception that was logged during the course of the test (if any) including the response provided by BA, the remedy to the problem recommended by BA, the results of re-testing that enabled the Exception to be closed and, identify unresolved Exceptions (if any).
3. Generally accepted statistical methods should be used to conduct analysis and render conclusions about competitive conditions.
    A. Each test should define the data population observed, measurements taken, and statistical tests used.
    B. Data should be normalized, tabulated and archived in a way that allows verification of test results and re-analysis of data using additional statistical methods, if appropriate.
    C. Hypothesis testing should frame the analysis of test results, whereby statistics would be calculated and analyzed to determine whether or not to reject a null hypothesis.
4. Final report specifically should certify:
    A. Relative ease or complexity of creating each interface with the supplied documentation.
    B. Any additional support required of and provided by BA-NJ to create the interface.
    C. Timeliness and level of support provided by after-market support services such as help desks and hot lines.

D. Any areas of improvement that would materially reduce the cost, complexity, and time of this development and operation to the CLECs or BA-NJ.

5. The report should recommend appropriate follow-up and oversight measures to ensure continued adherence to standards already achieved and prevent degradation of performance over time.

APPENDIX ONE

SPECIFIC REQUIREMENTS FOR TESTING PRE-ORDERING, ORDERING AND PROVISIONING

1. Pre-ordering:
   - A. Pre-ordering functionalities for each possible market entry option should be tested, including resale, interconnection and UNEs, individually and in combinations, including the UNE platform.
   - B. The test plan should specify that pending legal challenges to the issue of whether, to what extent and at what price BA-NJ may or may not be required to offer any particular UNE or combination of UNEs may not be considered in developing or processing test orders.
   - C. Test orders should be sufficiently defined to allow for testing of:
     - (1) All pre-ordering functions such as address validation, CSR availability, USOC availability, numbering resource availability, due date interval and availability, editing capabilities, systems integration capabilities, telephone number verification, current PIC Status verification, and facilities availability including loop qualification for various types of digital loops.
     - (2) All pre-ordering OSS and work processes, including editing capabilities and systems integration capabilities of the interfaces to support:
       - (a) Pre-Ordering
       - (b) Ordering
       - (c) TISOC and other associated centers
       - (d) Account team
       - (e) Legacy systems
     - (3) Performance measurement, such as:
       - (a) Response intervals
       - (b) Interface availability
       - (c) Facilities availability
       - (d) Information accuracy
2. Ordering:
   - A. Test orders should allow for testing access to product and service offerings for both simple and complex orders and promotions, performance of the provisioning and order status reports, editing capabilities and the integration of ordering systems with other systems.
   - B. Ordering functionalities for each possible market entry option should be tested, including resale, interconnection and UNEs, individually and in combinations, including the UNE platform. Again, test plan should specify that pending legal challenges to the issue of whether, to what extent and at what price BA-NJ may or may not be required to offer any particular UNE

or combination of UNEs may not be considered in developing or processing test orders.

C. Order types must be sufficiently defined to allow testing and evaluation of all ordering functions, including:
   (1) Business processes such as
      (a) Editing/format/reject
      (b) Intervention
      (c) Loop qualification
      (d) Facility availability
      (e) Confirmation
      (f) OSS and work processes such as
      (g) Manual
      (h) EDI
      (i) Local Service Request Manager
      (l) LCSC and other associated centers
      (m) Account team
      (n) Legacy systems
   (2) Performance measurements such as
      (a) Percent flow-through
      (b) Percent rejects
      (c) Reject interval
      (d) FOC interval
      (e) Speed of answer and call abandonment
      (f) Collocation response time
      (g) Average offered interval
      (h) Average submissions per order

3. Provisioning:
   A. Test orders should require a sizeable quantity of orders to be run through the system from start to finish and actually provisioned.
   B. Provisioning and installation functionalities for each possible market entry option should be tested, including resale, interconnection and UNEs, individually and in combinations, including the UNE platform. Again, test plan should specify that pending legal challenges to the issue of whether, to what extent and at what price BA-NJ may or may not be required to offer any particular UNE or combination of UNEs may not be considered in developing and processing test orders.
   C. Order types must be sufficiently defined to allow testing and evaluation of all provisioning and installation functions, including:
      (1) Business processes such as
         (a) Loop qualification
         (b) Facility availability
         (c) Jeopardy notice
         (d) Completion notice
      (2) OSS and work processes such as
         (a) Service Order Processor
         (b) Manual

(c) EDI
(d) LSRM
(e) TISOC and other associated centers
(g) Legacy systems
(h) CO and field forces

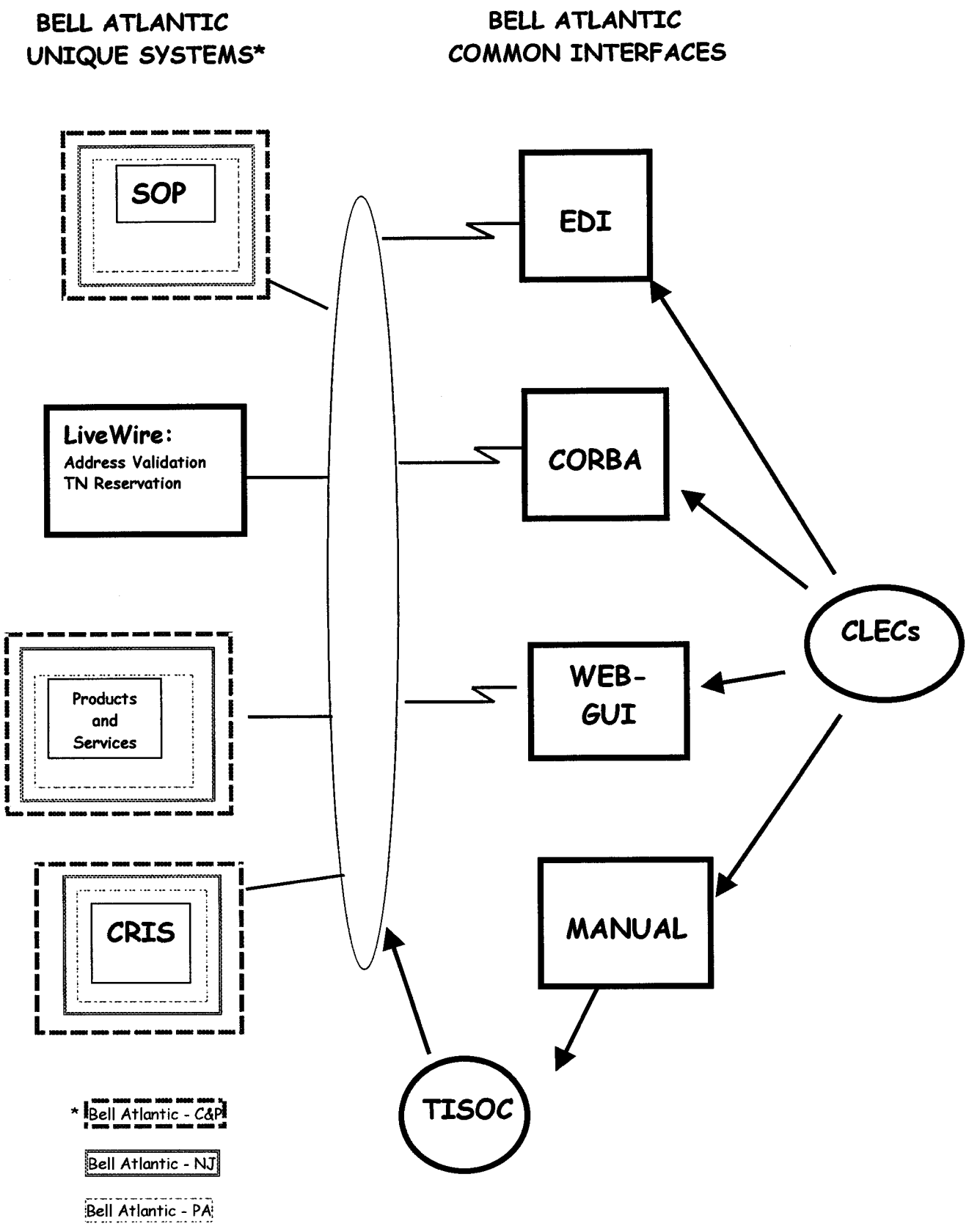
(3) Performance measurements such as
(a) Completion interval
(b) Held order
(c) Jeopardy
(d) Percent missed appointments
(e) Percent trouble within 30 days
(f) Order accuracy
(g) Coordinated conversions
(h) Completion notice interval
(i) 911 timeliness and accuracy
(j) Collocation arrangement time
(k) Percent collocation due date missed
(l) Percent completions/attempts without notice or with less than 24 hours notice
(m) Percent service loss from early cuts
(m) Percent loss from late cuts
(n) Average database update interval other than 911
(o) Database accuracy other than 911

Exhibit 2

Key Points of Difference in Legacy OSS Systems Between NJ and PA

- The interfaces to BA's OSS that are available to the CLEC's and Resellers are largely the same for NJ and PA, but the underlying legacy systems, which provide the OSS functions of Pre-ordering, Ordering, Provisioning, Repair and Maintenance and Billing are uniquely designed, developed and operated by BA-NJ and BA-PA.
- The interfaces look the same and process the same types of transactions, but the OSS processing of the transaction depends on the system design and functioning of the legacy systems. For example, a CLEC service order completion is generated by the individual BA Service Order Processor and is sent to the CLEC via the OSS interface. The way the order was processed in the BA-NJ or BA-NJ-PA legacy system would be unique to the ways the system has been programmed.
- Each of the different borders on the following diagrams represents individual sets of legacy systems. Bell of PA had its set of legacy systems that were designed and implemented separately from the set of legacy systems that were implemented for NJ Bell. Both of those systems were separately and independently designed and differ significantly from the set of systems implemented by the former C&P companies.
- As each of these unique sets of systems receives transactions from CLECs and Resellers via BA OSS interfaces which are specifically designed to be similar for BA-South systems, those transactions will result in very different processing outcomes. Again, the underlying legacy systems, while similar in generic name, have been customized to optimally perform for each of the original companies (Bell of PA, NJ Bell, and C&P).
- The business rules that are defined to specify how the systems require transactions to be formatted and delivered to BA have been made common by BA, reflecting the general sameness across the BA South region. Those business rules establish the requirements for processing and the behavior of the underlying legacy systems.
- Pre-Ordering transactions may access legacy systems to provide the Customer Service Record (CSR). These databases are designed based on the structure of the company's subscriber service and equipment records. These vary among the BA South entities.
- Ordering transactions must conform to different rules depending on the downstream legacy systems that process the order (SOP).
- Repair and Maintenance legacy systems are also tailored to interface with the specific network design as well as the set of products and services offered by the LEC.
- Billing is another area specific to products and services offered in BA-South retail as well as wholesale markets. The specifications of data captured at the switch for usage billing as well as access billing also differ.
- BA has been working with CLECs and the New Jersey and Pennsylvania regulators to determine the appropriate carrier-to-carrier performance measures and standards for local services. These measures will be generated from a common data base system that BA will operate that relies on the data obtained from each BA operating entity's interfaces and legacy systems.

PRE-ORDER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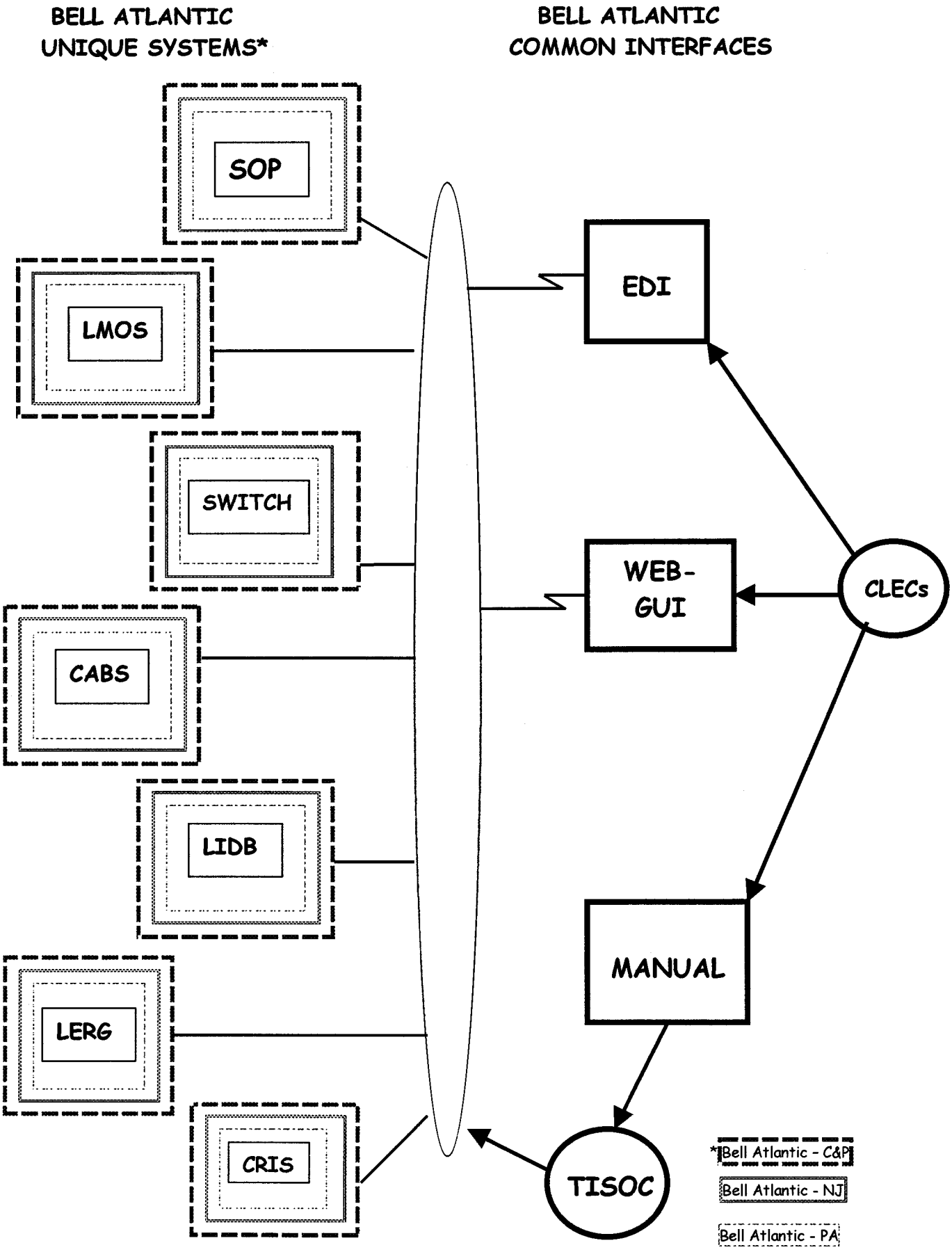
ORDERING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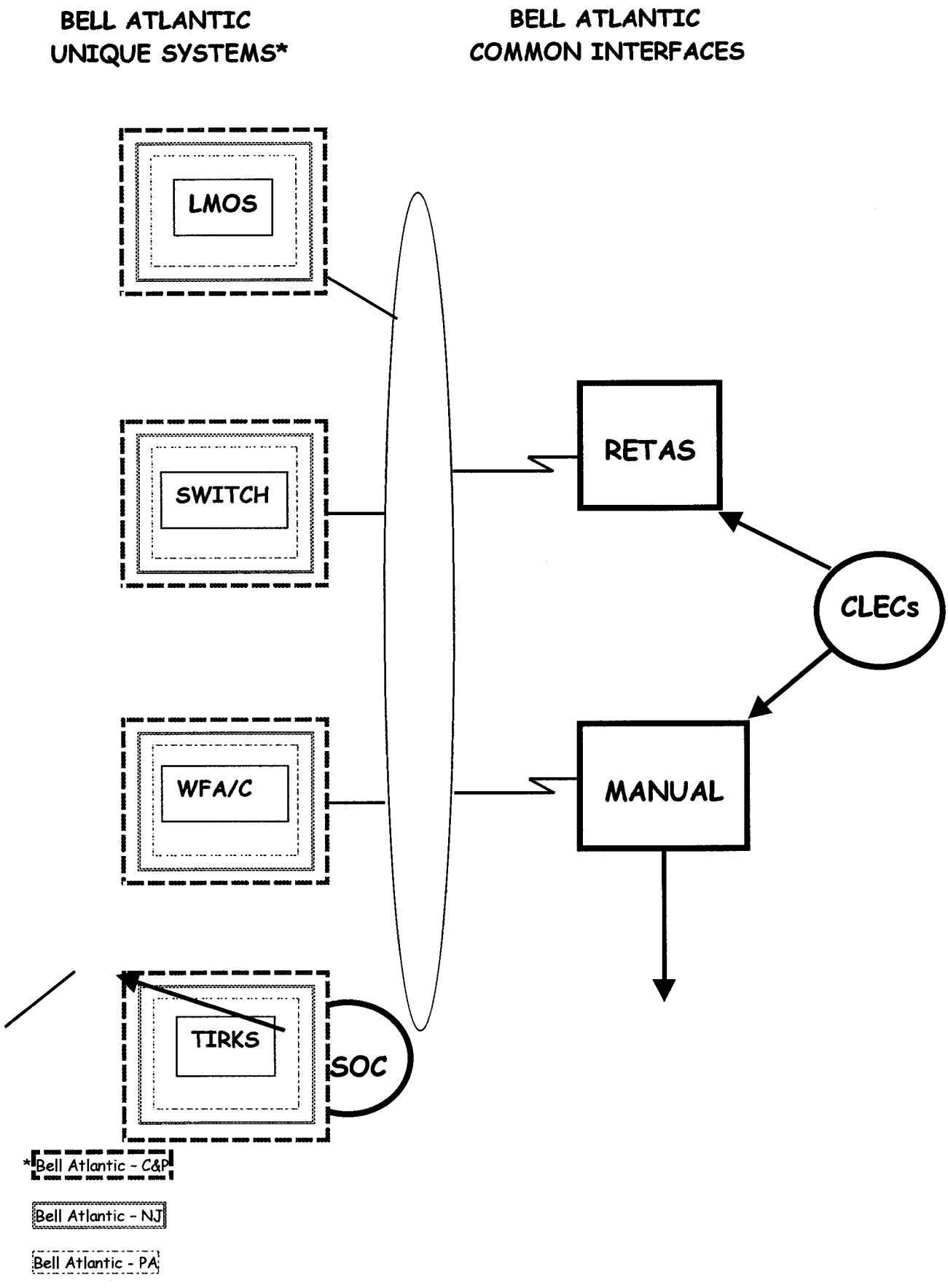
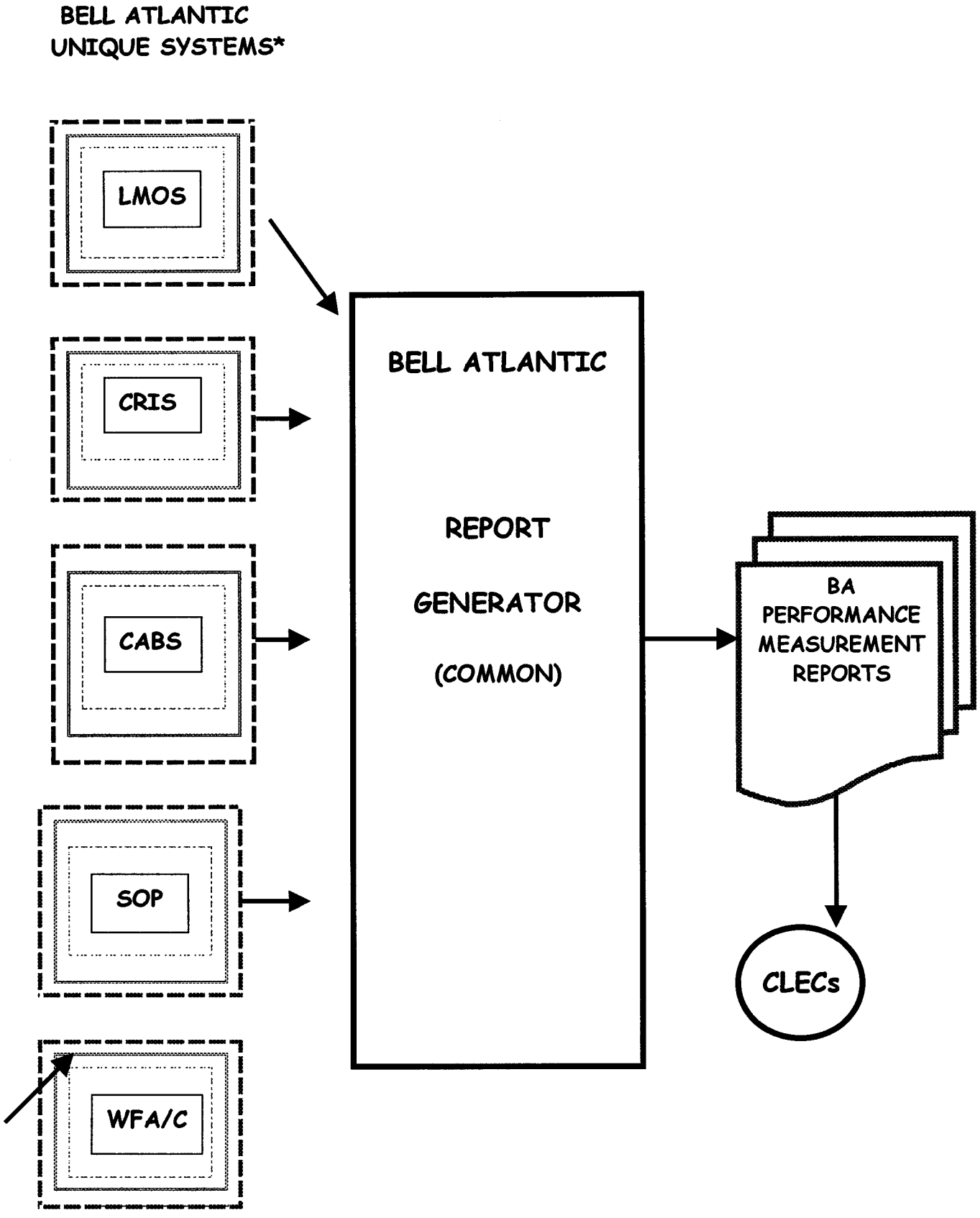
Bell Atlantic - NJ
Bell Atlantic - PA

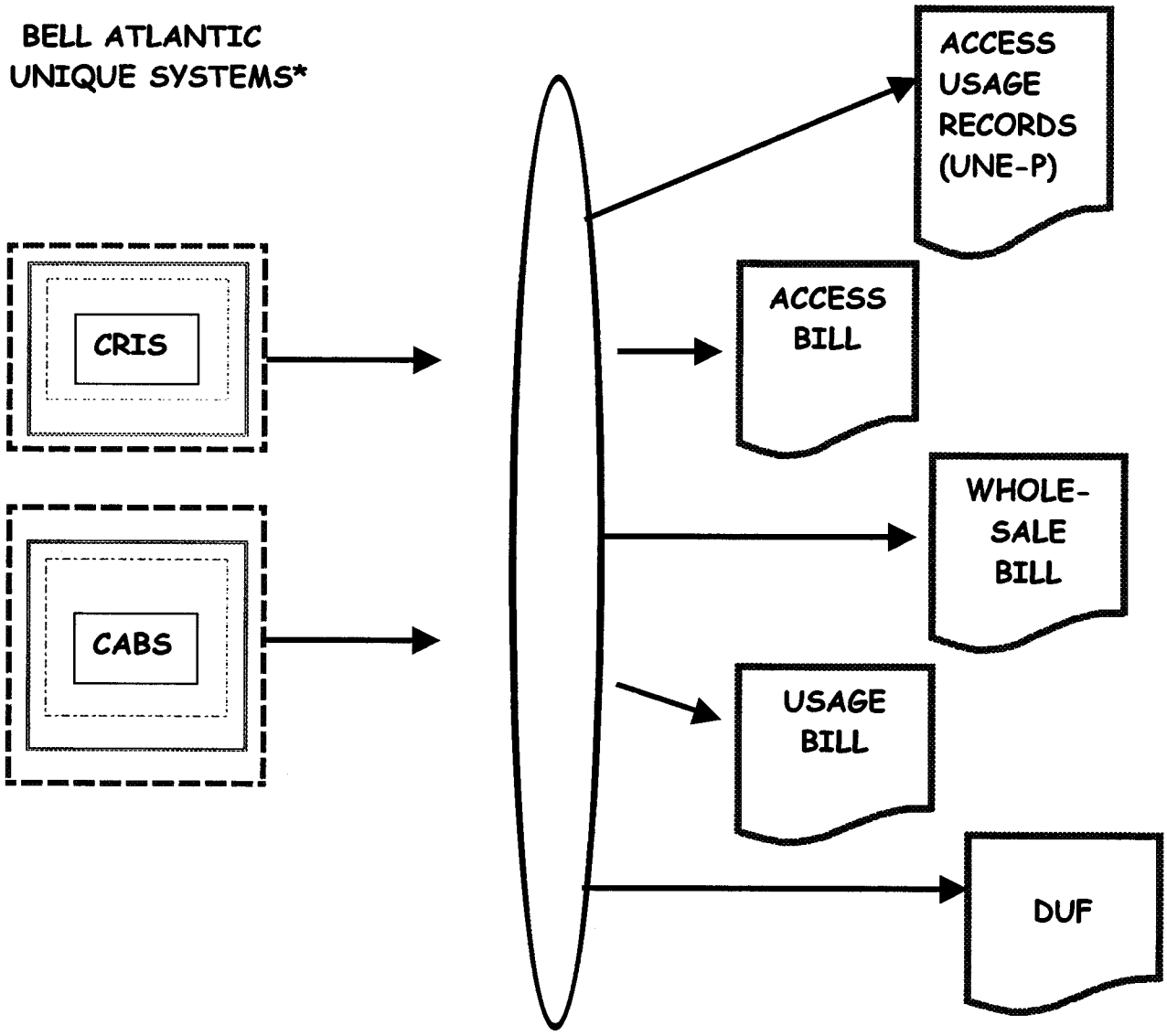
REPAIR AND MAINTENANCE



PERFORMANCE MEASURMENTS



BILLING



*Bell Atlantic - C&P

Bell Atlantic - NJ

Bell Atlantic - PA

Attachment 2

AT&T

295 North Maple Avenue
Basking Ridge, NJ 07920

June 16, 2000

BY FAX

Anthony Centrella
Director
Division of Telecommunications
Board of Public Utilities
State of New Jersey
Two Gateway Center
Newark, New Jersey 07102

Dear Mr. Centrella:

This is in response to your letter dated June 9, 2000 concerning Bell Atlantic-New Jersey, Inc.'s ("BA-NJ") obligation to provide AT&T Communications of New Jersey, Inc. ("AT&T"), as well as all other CLECs, non-discriminatory access to its operations support systems ("OSS"). As a preliminary matter, AT&T is concerned that the Board and the Staff's focus appears to be based on a misunderstanding of AT&T's decision, while at the same time not fully considering the negative impact on competition in New Jersey due to the entry obstacles caused by the above-cost UNE rates and BA-NJ's ongoing, four years and counting, failure to meet its OSS obligation.

Your letter refers to a decision by AT&T "to discontinue its plans to send Local Service Requests" and requests an explanation of such decision. First, let me clear up a key point: AT&T has not made any such broad decision. In fact, the hundreds of test lines are merely being suspended, not disconnected. Thus, as I discussed with Mr. Chappa, AT&T only has decided to postpone conducting friendly (or commercial) testing of BA-NJ's OSS because today such testing would be extremely *premature* and a *waste* of both financial and human resources given BA-NJ's lack of OSS readiness and the current uncertainty regarding UNE rates. As explained below, to conduct a friendly test under present conditions would be inappropriate. AT&T never understood Staff's informal request to encompass such action. As you note, Staff's request was for AT&T to send "orders as part of the testing process." As detailed in this letter and in past discussions, to send friendly test orders at this juncture would be to ignore the fact that today local entry in New Jersey is not economically viable and would neither

further nor enhance the testing process. AT&T also is perplexed over Staff's current concern in light of the Board's refusal to require a commercial test period as previously recommended by AT&T.

Your letter also overlooks the fact that AT&T anticipates conducting a friendly test in Pennsylvania in the near future. It is my understanding that Staff is well aware of these plans. To the extent any New Jersey and Pennsylvania systems are identical, the Pennsylvania testing may provide relevant information for the New Jersey testing process. This approach mirrors the direction given to KPMG in New Jersey in the draft Master Test Plan.

Additionally, the Board and Staff should be aware that AT&T ordered and maintained test lines at significant cost on the unfulfilled hope that meaningful friendly testing could have begun by now. Furthermore, AT&T ultimately would be forced to expend hundreds of thousands of dollars to initiate friendly testing at this time. In the current UNE rate and OSS environment, suspension of the test lines was the prudent financial decision because those test lines cannot be used right now in a meaningful way.

It is important to be clear on the purpose of a friendly test. A friendly test presupposes that local market entry is feasible in the near term. The ongoing OSS problems and unlawful UNE rates, and the uncertainty now created as a result, continue to make imminent entry unfeasible. As demonstrated by the discussions in the recently-concluded collaborative, today mass market entry in New Jersey for a CLEC is not economically viable. Once all appropriate conditions are in place, AT&T anticipates conducting such testing. AT&T continues to respectfully urge the Board and Staff to put these conditions in place.

A friendly test typically involves, at least, hundreds of access lines to assist the CLEC in determining if BA-NJ's OSS will function properly in a real-world environment. If BA-NJ's OSS fail in the real-world, as happened for months and months in New York, the CLEC (not BA-NJ) and its customers are harmed. Conducting a friendly test costs thousands and thousands of dollars per month and in general would not be performed until after the KPMG third-party test has identified and remedied any deficiencies in BA-NJ's OSS. To do otherwise makes little sense. Because KPMG is only at the beginning of its test, any friendly test would, in all probability, simply be duplicative of KPMG results. More importantly, AT&T believes it would incur additional costs to redo much, if not all, of the friendly testing as BA-NJ makes hardware or software changes to its OSS as a result of the KPMG test. In fact, as Staff knows, BA-NJ currently is making such changes as a result of the Pennsylvania third-party test as well as the New York service crisis caused by Bell Atlantic.

While I believe that I have answered all your concerns, a brief discussion of other issues raised in your letter is warranted. Since 1996, AT&T has devoted extensive monetary and manpower resources in an effort to develop conditions that would make local competition a reality in New Jersey. We are appreciative that the Board and Staff have entertained AT&T's views on the issues, and that some progress has been made. However, there has been an ongoing reluctance by the Board to take *all* steps necessary to achieve this goal and do so in a timely fashion. On a number of key issues, such as the UNE platform or the UNE rate structure referred to in your letter, AT&T and other CLECs were forced to pursue litigation in order to have their views "accommodated." And, with respect to UNE rates, AT&T still must await the Board's decision in upcoming proceedings in order to determine if local entry New Jersey is economically feasible.

There also remains needless disagreement that the LSOG4 test should be halted if major problems develop. The LSOG 4 interface is the current interface, most major carriers entering the local market will use it and BA-NJ is required to implement it successfully. If major problems develop, BA-NJ should fix them and KPMG should perform appropriate re-testing. If major problems develop with LSOG4 and BA-NJ does not promptly fix them, efforts to open the local market to competition will fail.

Finally, AT&T will continue to work with the Board and the Staff in their endeavors to remove all obstacles to local competition in New Jersey. These obstacles, however, are not found amongst the CLEC actions. CLECs have demonstrated their desire to break through BA-NJ's very profitable monopoly so that New Jersey local telephone customers can enjoy the benefits of competition.

I would be happy to discuss further any of the above at your convenience.

Sincerely,

Robert J. Kirchberger
Government Affairs
Assistant Vice President
Atlantic States

Attachment 3

Anthony Centrella
Director

Division of
Telecommunications

Tel. # (973) 648-2794
Fax. # (973) 624-9453

STATE OF NEW JERSEY
Board of Public Utilities
Two Gateway Center
Newark, New Jersey 07102

June 9, 2000

Robert J. Kirchberger, Director
AT&T Government Affairs
295 North Maple Avenue
Room 3134C2
Basking Ridge, NJ 07920

Dear Mr. Kirchberger:

It has recently come to my attention that AT&T's intention to begin forwarding Local Service Requests in New Jersey has been deferred or dropped. Upon learning of this information, I asked Frank Chappa to contact the AT&T technical group to obtain more facts. AT&T informally indicated that the information was correct and that AT&T no longer felt it could justify such ordering due to economic reasons.

As you know, for the last 2 years AT&T has continued to request the Board to address OSS issues that are important to AT&T and Staff has made every effort to accommodate those requests. The company pressed for an OSS Collaborative similar to that in New York and such a Collaborative was conducted. As requested, we have include AT&T on testing conference calls similar to New York and Pennsylvania. The Commissioners and Staff have repeatedly heard AT&T's views on the LSOG2/4 matter and our view on this has remained consistent; i.e., the test will initiate and continue on LSOG4 and only revert to LSOG2 if major problems develop. Recently, the Board initiated a reconsideration of UNE rate structures, which has been described by AT&T as being critical to local competition in New Jersey. In short, we have been attempting to address the concerns of AT&T as best we can. To my knowledge, the only request Staff has made to AT&T on OSS was to start sending orders as part of the testing process.

I would appreciate a written response from AT&T as to why, at this late date in the OSS test planning, AT&T has made the decision to discontinue its plans to send Local Service Requests. Please respond by June 15, 2000.

Sincerely,

Anthony Centrella, Director
Division Of Telecommunications

Attachment 4

	Metric	NY		PA		MA		NJ	
		%	# Obs.	%	# Obs.	%	# Obs.	%	# Obs.
Flow Thru Total (UNE)	OR-5-01-3000	87.74	285,126	80.84	77,527	72.64	23,088	51.35	8,361
Flow Thru Simple (UNE)	OR-5-02-3000	N/A	N/A	81.37	76,008	N/A	N/A	51.01	7,393
Flow Thru Achieved (UNE)	OR-5-03-3000	95.98	260,650	N/A	N/A	96.73	17,337	77.93	5,509
Reject Rate (UNE)	OR-3-01-3000	14.9	331,559	22.6	83,018	18.25	28,564	40.86	9,422

Attachment 5

From: wholesale.metrics.change.control@verizon.com
Sent: Friday, January 25, 2002 9:02 PM
To: wholesale.metrics.change.control@verizon.com; deborah.a.webster-grochmal@verizon.com; roger.wieland@verizon.com; robert.j.graves@verizon.com; richard.t.mcdonald@verizon.com; katherine.a.ohara@verizon.com; Bloss,Joseph R (Joe) - NCAM; Batista-Harding,Pauline - NCAM; Pappalardo,Frederick C - LGA; terence.holm@atx.com; GWARDELL@cablevision.com; lmaese@cablevision.com; brett.cameron@Conectiv-Comm.com; jsulliva@covad.com; dmjanas@mintz.com; ckiser@mintz.com; wadavis@mintz.com; dkriete@rhoads-sinon.com; rick.hicks@xo.com; Cindy.Young@mail.sprint.com; chana.s.wilkerson@wcom.com; bryan.green@wcom.com; lconry@rhythms.net; centrella@bpu.state.nj.us; corcoran@bpu.state.nj.us; chappa@bpu.state.nj.us; artale@bpu.state.nj.us; marilyn.c.devito@verizon.com; alethea.mcfarlane-nance@verizon.com; lorraine.c.deblis@verizon.com; kathy.felock@verizon.com; andrea.j.wagner@verizon.com; lisa.m.lipuma@verizon.com; patricia.a.anderson@verizon.com
Subject: Verizon Wholesale Metrics Change Control Notification CC # CCNJ2 002-03613-Mai

Metric Change Control Record

Title of Change: CCNJ2002-03613-Mai	Data Calculation Correction to line counts for C2C Maintenance Specials metrics MR-2-01 and MR-2-05	Document No.:	
First Data Month in Production:	December 2001	Scheduled Filing Date:	January 25, 2002
Data Month(s) Affected:	June 2000 , July 2000 , August 2000 , September 2000 , October 2000 , November 2000 , December 2000 , January 2001 , February 2001 , March	Products Affected:	Specials

	2001 , April 2001 , May		
	2001 , June 2001 , July		
	2001 , August 2001 ,		
	September 2001 , October		
	2001 , November 2001		
Change Type:	Data Calculation Correction	State:	New Jersey
Domains Involved:	Maintenance	Report Type:	Carrier to Carrier
Metrics Affected:	MR-2-01, MR-2-05	Mode of Entry:	Resale

Business Reason:
During a review of Maintenance Specials metrics in January 2002, it was determined that Direct Inward (DI) PBX trunks were erroneously included in the Lines Counts.

Additional Information:
Pennsylvania has been impacted since February 2000. New Jersey has been impacted since June 2000. Virginia has been impacted since August 2000.

*Status:	Completed

Attachment 6

From: wholesale.metrics.change.control@verizon.com
Sent: Wednesday, January 30, 2002 9:03 PM
To: wholesale.metrics.change.control@verizon.com; deborah.a.webster-grochmal@verizon.com; roger.wieland@verizon.com; robert.j.graves@verizon.com; richard.t.mcdonald@verizon.com; katherine.a.ohara@verizon.com; Bloss,Joseph R (Joe) - NCAM; Batista-Harding,Pauline - NCAM; Pappalardo,Frederick C - LGA; terence.holm@atx.com; GWARDELL@cablevision.com; lmaese@cablevision.com; brett.cameron@Conectiv-Comm.com; jsulliva@covad.com; dmjanas@mintz.com; ckiser@mintz.com; wadavis@mintz.com; dkriete@rhoads-sinon.com; rick.hicks@xo.com; Cindy.Young@mail.sprint.com; chana.s.wilkerson@wcom.com; bryan.green@wcom.com; lconry@rhythms.net; centrella@bpu.state.nj.us; corcoran@bpu.state.nj.us; chappa@bpu.state.nj.us; artale@bpu.state.nj.us; marilyn.c.devito@verizon.com; alethea.mcfarlane-nance@verizon.com; lorraine.c.deblis@verizon.com; kathy.felock@verizon.com; andrea.j.wagner@verizon.com; lisa.m.lipuma@verizon.com; patricia.a.anderson@verizon.com
Subject: Verizon Wholesale Metrics Change Control Notification CC # CCNJ2 001-02320-Ord

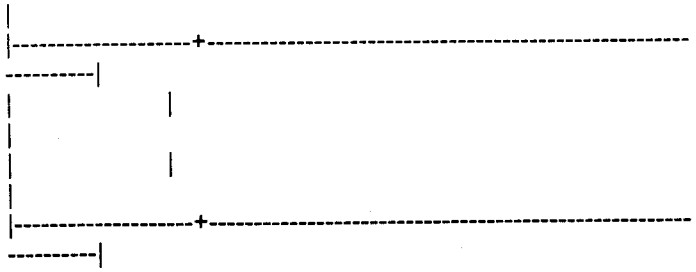
Metric Change Control Record			
Title of Change: CCNJ2001-02320-Ord	Data calculation correction to correct classifications of PONS based on additional Network Channel, Network Channel Interface and Secondary Network Channel Interface codes in TOS table for C2C	Document No.:	
First Data Month in Production:	February 2002	Scheduled Filing Date:	March 25, 2002
Data Month(s) Affected:	February 2001 - March 2001 - April 2001 - May 2001 - June 2001 - July	Products Affected:	Complex, POTS - Total, Specials

	2001 - August 2001 - September 2001 - October		
	2001 - November 2001 - December 2001 - January 2002		
Change Type:	Data Correction	State:	New Jersey
Domains Involved:	Ordering	Report Type:	Carrier to Carrier
Metrics Affected:	OR-1 and OR-2	Mode of Entry:	UNE

Business Reason:
A July, 2001 investigation revealed that a small number of UNE Loop orders were not being classified properly in the Complex, Specials and POTS categories due to inadequate combinations of Network Channel, Network Channel Interface and Secondary Network Channel Interface codes. Some orders that should have been classified as Complex were erroneously classified as either Specials or POTS.

Additional Information:

*Status:	Rescheduled



Attachment 7

From: wholesale.metrics.change.control@verizon.com
Sent: Thursday, January 31, 2002 9:01 PM
To: wholesale.metrics.change.control@verizon.com; deborah.a.webster-grochmal@verizon.com; roger.wieland@verizon.com; robert.j.graves@verizon.com; richard.t.mcdonald@verizon.com; katherine.a.ohara@verizon.com; Bloss,Joseph R (Joe) - NCAM; Batista-Harding,Pauline - NCAM; Pappalardo,Frederick C - LGA; terence.holm@atx.com; GWARDELL@cablevision.com; lmaese@cablevision.com; brett.cameron@Conectiv-Comm.com; jsulliva@covad.com; dmjanas@mintz.com; ckiser@mintz.com; wadavis@mintz.com; dkriete@rhoads-sinon.com; rick.hicks@xo.com; Cindy.Young@mail.sprint.com; chana.s.wilkerson@wcom.com; bryan.green@wcom.com; lconry@rhythms.net; centrella@bpu.state.nj.us; corcoran@bpu.state.nj.us; chappa@bpu.state.nj.us; artale@bpu.state.nj.us; marilyn.c.devito@verizon.com; alethea.mcfarlane-nance@verizon.com; lorraine.c.deblis@verizon.com; kathy.felock@verizon.com; andrea.j.wagner@verizon.com; lisa.m.lipuma@verizon.com; patricia.a.anderson@verizon.com
Subject: Verizon Wholesale Metrics Change Control Notification CC # CCNJ2 002-03416-Ord

Metric Change Control Record

Title of Change: CCNJ2002-03416-Ord	Data Calculation Correction for the elimination of duplicate ASRs from Specials and Trunks in NJ, PA, and VA.	Document No.:	
First Data Month in Production:	October 2001	Scheduled Filing Date:	None
Data Month(s) Affected:	July 2000 , August 2000 , September 2000 , October 2000 , November 2000 , December 2000 , January 2001 , February 2001 , March 2001 ,	Products Affected:	Specials and Trunks

	April 2001 , May 2001 , June 2001 , July 2001 , August 2001 , September 2001		
Change Type:	Data Calculation Correction	State:	New Jersey
Domains Involved:	Ordering	Report Type:	Carrier to Carrier
Metrics Affected:	OR 1-03 - OR 1-13, OR 2-03 - OR 2-12, OR 3-01, OR 5-01	Mode of Entry:	Trunks

Business Reason:
The Evidentiary Database receives ASR data from Exact through BAIRS for all MidAtlantic states. A small percentage of ASRs entered into EXACT were found to be duplicates (duplicated CCNA and PON) due to the fact that different transactions associated with the same ASR may be processed by different service reps at different centers.

Additional Information:
Change Control 2000-00106 was issued December, 2000, and requested a system change to the EXACT system to prohibit the receipt of duplicate ASRs. However, due to the complexity of the requested change and the length of time to implement, a different solution was pursued. The new solution is covered

by |
| this change control.
|
| Retroactive Data is not available
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|*Status: |Scheduled
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